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L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2000 ACS  
 AN 1999:468133 CAPLUS

DN 131:103278

TI Acrylic flexible light pipe of improved thermal stability  
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 Stanislaus; Work, William James

PA Rohm and Haas Co., USA

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM G02B001-04

ICS B29C047-88

NCL 385143000

CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 73

FAN.CNT	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
1	US 5930442	A	19990727	US 1997-950020	19971014 <---

PI A crosslinkable core mixt. for a subsequently-cured composite contains a  
 AB thermoplastic core polymer having a wt. av. mol. wt. of 2,000-250,000  
 daltons and a vinyl end-group content of <0.5 per 1000 monomer units, the  
 core mixt. comprising (a) a thermoplastic core polymer comprising (i)  
 80-99.9% of polymd. units of a C1-18 alkyl acrylate or mixts. thereof  
 with up to 50% of the C1-18 alkyl acrylate of polymd. units of a C1-18 alkyl  
 methacrylate; (ii) 0.1-18.2% of polymd. units of a functionally reactive  
 monomer, and (iii) 0-10% of polymd. units of a refractive index  
 increasing monomer selected from styrene, benzyl acrylate, benzyl methacrylate,  
 phenylethyl acrylate or phenylethyl methacrylate; (iv) 0.002-0.3%  
 residual mols. of or of decompn. products of an initiator of polymn., including  
 end groups on the thermoplastic core polymer, the initiator having a  
 half-life at 60 C. of 20 to 400 min; (v) 0.2-2.0% of residual mols. of or of  
 decompn. products of a chain transfer agent, including end groups on the  
 thermoplastic core polymer; (b) from 0.1 to 10%, based on the  
 crosslinkable core mixt. wt., of a reactive additive. It has been found  
 that improved thermal stability, as reflected in color formation, can be  
 imparted by adjusting the polymn. conditions to produce the uncured core  
 polymer of the core/clad construction with a much reduced terminal vinyl  
 content, preferably below 0.5 vinyl groups/1000 monomer units.  
 ST acrylic polymer light pipe thermal stability  
 IT Optical materials  
 (acrylic flexible light pipe of improved thermal stability)  
 IT Optical instruments  
 (light pipes, flexible; acrylic flexible light pipe of improved  
 thermal stability)  
 IT 31986-96-6P, Ethyl acrylate, 3-methacryloxypropyltrimethoxysilane  
 copolymer  
 RL: DEV (Device component use); IMF (Industrial manufacture); PRP  
 (Properties); PREP (Preparation); USES (Uses)  
 (acrylic flexible light pipe of improved thermal stability)

RE.CNT 6  
 RE  
 (1) Bertelo; US 5773520 1998  
 (2) Bigley; US 5406641 1995

- (3) Bigley; US 5485541 1996 CAPLUS
- (4) Ho; US 5555525 1996 CAPLUS
- (5) Trabert; US 5318737 1994
- (6) Zarian; US 5298327 1994